

LEVSKIY, L. K., Cand Phys-Math Sci -- (diss) "Study of reaction products for cosmic rays reacting with meteoritic substances." Leningrad, 1960. 12 pp with graphs; (Academy of Sciences USSR, Laboratory of the Geology of Pre-Cambrian); 250 copies; free; (KL, 24-60, 128)

*LEVSKY, L.A.*

## PAGE 1 BOOK REPRODUCTION

SOW/PDP/PP  
807/5/29/99

Akademija nauk SSSR. Kaitset po meteoritam

Meteorit, shornik sastav. Vyp. 15 (Meteoritics) Collection of Articles, No. 15)

Moskva, Izd. Akademiia Nauk SSSR, 1960. 1,200 copies printed.

Ed.: V.O. Pepelev, Academician. Prezdr. Ed.: Ye.I. Krasov, Ed. of Publishing

House, Kite, Publishing Tech. Ed.: A.P. Osipov.

PURPOSE: This publication is intended in the study of meteorites. In particular, those interested in the study of meteorites.

CONTENTS: This collection of 26 articles on problems in meteoritics includes the Transactions of the Eighth Meteorite Conference which took place in Moscow, June 3 - 5, 1958. An interesting article reviews recent progress in the field, particularly in the matter of determining the age of meteorites. Individual articles discuss the full physical and chemical properties, and the age of meteorites. The danger presented by meteors to artificial earth satellites is discussed. V.O. Pepelev describes the theory and reduces computations for determining the distribution of mass in the atmosphere during lunar eclipses.

Determining the mass of individual articles.

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LEVSKIY, L.K.

Absorption of cosmic radiation by iron meteorites. Geokhimiia  
no.3:274-277 '60. (MIRA 14:5)

1. Laboratory of the Precambrian Geology, Academy of Sciences,  
U.S.S.R., Leningrad.

{ Meteorites)  
(Cosmic rays)

LEVSKIY, L. K.

$H^3$  and  $Ar^{39}$  in iron meteorites. Radiokhimiia 2 no.4:491-494 '60.  
(MIRA 13:9)

(Tritium) (Argon--Isotopes) (Meteorites)

3(4) 3.1550

AUTHORS: Gerling, E. K., Levskiy, L. K. SOV/20-130-1-11/69  
TITLE: The Cosmic Age of the Meteorite of Sikhote-Alin  
PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 1, pp 45 - 46  
(USSR)

ABSTRACT: In the present paper the content of the radioactive isotopes  $H^3$  and  $A^{39}$  in the meteorite of Sikhote-Alin is determined. A counter with relatively low background was constructed for measuring the low activities to be expected. An accurate description of this device and the experimental technique will be given in a separate paper. The results of measurements are summarized in table 1. The data obtained from irradiation with iron targets with  $3 \cdot 10^3$ -Mev protons yielded  $He^3/H^3 = 2.4$  for the ratio of the  $He^3$  and  $H^3$  nuclei. Thus, the value  $1.3 \cdot 10^{13}$  at/g is obtained for the amount of  $He^3$  formed by tritium decay. By means of this quantity and the rate of tritium decay (i.e., the rate of production after equilibrium has occurred) the duration of irradiation or the cosmic age of the meteorite was found to

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SOV/20-130-1-11/69

## The Cosmic Age of the Meteorite of Sikhote-Alin

be  $(900 \pm 200) \cdot 10^6$  years. The computation of the total amount of decayed  $A^{39}$  nuclei is very complicated.  $A^{39}$  decays into  $K^{39}$ , and the latter is added to the potassium contained in the meteorite. This potassium admixture, cannot be reliably determined by experiments, the amount of decayed  $A^{39}$  nuclei, however, can be estimated proceeding from the content of  $A^{38}$  ( $= 1.1 \cdot 10^{-7} \text{ cm}^3/\text{g}$ ). By taking into account several corrections  $A^{39}/A^{38}$  is found to be 0.5. After introduction of these corrections the amount of the  $K^{39}$  atoms formed by the decay of  $A^{39}$  is  $1.7 \cdot 10^{12} \text{ at/g}$ . Herefrom it follows that the duration of irradiation  $T = (430 \pm 50) \cdot 10^6$  years. This value is close to that obtained by E. L. Fireman (Ref 3), and is obviously the most reliable one. The duration of irradiation obtained here allows to estimate the number  $N$  of cosmic particles per  $1 \text{ cm}^2$  and 1 sec from the amount of  $A^{38}$ :  $N = 2n_1/\sigma_A^{38} n_2 T$ , where  $n_1$  denotes the number of the  $A^{38}$  atoms in 1 g,  $n_2$  - the number of iron atoms in 1 g,  $\sigma_A^{38}$  the mean production cross section of ✓

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The Cosmic Age of the Meteorite of Sikhote-Alin

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$A^{38}$ . Therefrom it results that  $N \sim 2,3$  particles/cm<sup>2</sup>.sec. This value is in satisfactory agreement with the experimental data for the density of cosmic radiation in the polar regions of the Earth (2 particles/cm<sup>2</sup>.sec). There are 1 table and 4 references.

ASSOCIATION: Laboratoriya geologii dokembriya Akademii nauk SSSR (Laboratory for the Geology of the Pre-Cambrian of the Academy of Sciences of the USSR)

PRESENTED: March 11, 1959, by A. A. Polkanov, Academician

✓

SUBMITTED: March 11, 1959

Card 3/3

GERLING, Erik Karlovich. Prinimali uchastiye: YASHCHENKO, M.L., starshiy nauchnyy sotrudnik; YERMOLIN, G.M., starshiy nauchnyy sotrudnik; TITOV, N.Ye., mladshiy nauchnyy sotrudnik; AFANAS'YEVA, L.I., mladshiy nauchnyy sotrudnik; KOL'TSOVA, T.V., mladshiy nauchnyy sotrudnik; OVCHINNIKOVA, G.V., mladshiy nauchnyy sotrudnik; SHUKOLYIKOV, Yu.A., mladshiy nauchnyy sotrudnik; LEVSKIY, L.K., mladshiy nauchnyy sotrudnik; MOROZOVA, K.M., mladshiy nauchnyy sotrudnik; MATVEYEVA, I.I., mladshiy nauchnyy sotrudnik; BARKAN, V.G., mladshiy nauchnyy sotrudnik; BARANOVSAYA, N.V., mladshiy nauchnyy sotrudnik; VARSHAVSKAYA, E.S., mladshiy nauchnyy sotrudnik; SERGEYEV, A.N., starshiy laborant; KURBATOV, V.V., starshiy nauchnyy sotrudnik; KRATTS, K.O., kand.geol.-mineral.nauk, otd.red.; ARON, G.M., red.izd-va; BOGACHEVER, V.T., tekhn.red.

[Present status of the argon method for age determination and its use in geology] Sovremennye sostoianie argonovogo metoda opredeleniya vozrasta i ego primenenie v geologii. Moskva, Izd-vo Akad.nauk SSSR, 1961. 130 p. (MIRA 14:12)

1. Radiyevyy institut im. V.G.Khlopina (for Kurbatov).  
(Geological time) (Radioargon dating)

LEVSKIY, I.K.

Cosmogenic isotopes in the Yardymly meteorite. Geokhimiia no.4:358  
'61. (MIRA 14:5)

1. Laboratoriya geologii dokembriya AN SSSR, Leningrad.  
(Yardymly—Meteorites)  
(Helium—Isotopes)  
(Argon—Isotopes)  
(Neon—Isotopes)

23884  
S/186/61/003/001/017/020  
A051/A129

3.1900 (1057,1062)

AUTHORS: Gerling, E.K., Levakin, L.K.

TITLE: The yield of argon isotopes when irradiating targets with  
660 Mev-energy protons

PERIODICAL: Naukobizniya, v 3, no 1, 1961, 97-100

TEXT: The authors irradiated targets of complex chemical composition in a synchrocyclotron in order to clarify certain contradictions. According to Ref 1 it was previously established that certain parts of iron meteorites enriched with troilite, FeS, and Shreibergite,  $(Fe,Ni,Co)_3P$ , yield a relatively higher content of cosmogenic products than nickel-iron. The assumption that the interaction of fast cosmic particles with the nuclei of average weight (Fe,Ni) in the presence of light nuclei (S,P) causes an increase in nuclear products is contradictory to modern theories and experimental data on high-energy reactions. In this article the authors establish

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The yield of argon isotopes ...

able to select an empirical formula which would connect the values of the formation cross-section of the argon isotope. They show that the formation of argon isotopes does not depend within the limits of the experimental error on the chemical composition of the target. The empirical formula selected was:

$$\sigma(A) = e^{-R(z-SA)^2} \quad (2), \text{ where } R = 2.60, S = 0.475, Z = 18,$$

A the mass number. The graphical presentation of Formula 2, including the experimental data, is given in curve 1 of the graph. Curve 2 is a graphical representation of Rudstam's (Ref 7) formula for Z = 18:

$$\sigma(A,18) = e^{[PA-Q-R(18-SA)^2]} \quad (3), \text{ where } P = 0.209, Q = 8.54,$$

R = 1.40, S = 0.466, A-mass number. Curve 1 is said to have two characteristic features: 1) a wide dome-like shape, characteristic for radiochemical investigations of reaction products of deep fission and 2) the maximum of the curve is located close to the mass number 38, i.e., exactly on the line of stability of the nuclei in this region. The authors point out that an

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The yield of argon isotopes ...

increase in the content of cosmogenic products for those parts of meteorites having troilite and shreibergite in their composition is still an unsolved problem requiring further investigation. There are 2 tables, 1 graph and 9 references: 4 Soviet-bloc, 5 non-Soviet-bloc.

Table 1:

No of target	$\text{Ar}^{36}$ (in $\text{cm}^3/\text{g} \cdot 10^{-9}$ )	$\text{Ar}^{38}$ (in $\text{cm}^3/\text{g} \cdot 10^{-9}$ )	$\text{Ar}^{39}$ (in $\text{cm}^3/\text{g} \cdot 10^{-9}$ )	$\frac{\text{Ar}^{38}}{\text{Ar}^{36}}$	$\frac{\text{Ar}^{38}}{\text{Ar}^{39}}$
1	$12.7 \pm 1.5$	$112 \pm 10$	$54 \pm 4$	$9 \pm 1$	$2.1 \pm 0.1$
2	$2 \pm 1$	$12 \pm 3$	$7 \pm 1$	$9 \pm 5$	$1.8 \pm 0.7$

Table 2:

No of target	$\text{Ar}^{36}$ (in mbarn)	$\text{Ar}^{38}$ (in mbarn)	$\text{Ar}^{39}$ (in mbarn)
1	$0.9 \pm 0.1$	$8.2 \pm 0.8$	$3.9 \pm 0.3$
Card 4/5	$1.2 \pm 0.6$	$7.4 \pm 1.5$	$4.3 \pm 0.5$

LEVSKIY, L.K.

Isotopic composition of xenon in meteorites. Geokhimiia  
no.9:837-838 '62. (MIRA 15:11)

1. Laboratoriya geologii dokembriya AN SSSR, Leningrad.  
(Xenon--Isotopes)  
(Meteorites)

GERLING, E.K.; LEVSKIY, L.K.; MOROZOVA, I.M.

Diffusion of radiogenic argon from minerals. Geokhimiia  
no.6:539-543 Je '63. (MIRA 16:8)

1. Laboratory of Geology of the Precambrian, Leningrad.

LEVSKIY, L.K.

Diffusion of helium from stone meteorites. Geokhimiia no.6:  
544-548 Je '63. (MIRA 16:8)

1. Laboratory of Geology of the Precambrian, Leningrad.

L 11053-63

EPF(n)-2/EWT(m)/BDS—AFFTC/ASD/AFWL/SSD—Pu-4--DM

ACCESSION NR: AP3001179

S/0089/63/014/005/0484/0487

67  
64

AUTHOR: Dobronravova, A. N.; Levskiy, L. K.; Murin, A. N.; Titov, N. Ye.

TITLE: Cross section for formation of krypton and xenon isotopes during uranium fission by protons of 680 Mev energy <sup>19</sup>

SOURCE: Atomnaya energiya, v. 14, no. 5, 1963, 484-487

TOPIC TAGS: krypton, xenon, isotope formation, uranium fission by protons

ABSTRACT: In continuation of the previous work (Geokhimiya, v. 6, 540, 1962) on the relative yield of xenon and krypton isotopes which are fragments of uranium fission by protons of 680 Mev energy, the authors have irradiated two more uranium targets in the inner beam of the synchrocyclotron of the laboratory for nuclear problems of the Consolidated Institute for nuclear studies. After heating the specimens, the gases were collected by activated charcoal at -183C, and, after purification, were analyzed in a MV-23-02 mass spectrometer<sup>®</sup>. To avoid wasting gases, an electric scheme was developed for a speedy tuning for recording each isotope. Description of this scheme is given. The relative yield for the krypton (masses 78 to 86), xenon (124 to 136), and rubidium (83, 84) isotopes is summarized in a table. Effective cross sections are computed using the usual formulas.

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L 11053-63

ACCESSION NR: AP3001179

Theoretical estimation is made for the distribution of nuclear fragments as a function of A and Z. "The authors are grateful to V. P. Dzhelepov and E. K. Gerling for their kindness in giving us the opportunity to work with the synchrocyclotron and the MV-23-02 mass spectrometer and also to V. I. Baranovskiy for discussion of results." Orig. art. has: 5 references, 1 figure, 2 tables.

3

ASSOCIATION: none

SUBMITTED: 27Jul62

DATE ACQD: 21Jun63

ENCL: 00

SUB CODE: 00

NO REF Sov: 003

OTHER: 002

See form  
Card 2/2

S/0007/64/000/007/0601/0609

ACCESSION NR: AP4042629

AUTHOR: Levskiy, L. K.

TITLE: Age and thermal history of stony meteorites and minerals

SOURCE: Geokhimiya, no. 7, 1964, 601-609

TOPIC TAGS: meteorite, thermal history, radioactive age dating

ABSTRACT: This study was undertaken because of the uncertainty in age determinations of stony meteorites. Considerable variation is found among values determined by different methods ( $\text{He}^4$ ,  $\text{A}^{40}$ , and isotope ratios of Pb, Sr, or Os). Whether meteorites come from a single parent body or from several, the  $\text{He}^4$  and  $\text{A}^{40}$  ages should agree. Since they do not, subsequent history must be responsible for the deviation. The author examines the problem of separating radiogenic and cosmogenic isotopes in terms of the theory of defect annealing in crystals. It is assumed that  $\text{He}^4$  and  $\text{A}^{40}$  began to accumulate at some moment in the parent body (the body is considered to have been free of radiogenic isotopes previously). The author considers three possible types of thermal action: 1) the gases are given off at a single temperature at constant rate from the moment the meteoritic material

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L 31095-66 EWT(m)

ACC NR: AP6022810

SOURCE CODE: UR/0089/65/019/005/0452/0459  
78  
13  
BAUTHOR: Murin, A. N.; Lovskiy, L. K.; Zaldharova, A. E.

ORG: none

TITLE: Production of stable krypton and xenon isotopes by irradiation of aluminum halides in reactors  
<sup>19</sup>      <sup>19</sup>

SOURCE: Atomnaya energiya, v. 19, no. 5, 1965, 458-459

TOPIC TAGS: isotope, krypton, xenon, halide, reactor neutron flux, inert gas, quartz, activated carbon, mass spectroscopy, gas analysis, aluminum compound, irradiation

ABSTRACT: Enriched isotopes of the inert gases may be obtained by exposure of aluminum halides to a neutron flux. The halides were prepared by the reduction of the corresponding Ag halide with Al in quartz containers at about 400°C. Irradiation of 20 g of the Al halides by a total flux of  $2.16 \times 10^{17}$  n/cm<sup>2</sup> resulted in the following yields of gaseous products: from AlBr<sub>3</sub>,  $2.4 \times 10^{-2}$  cm<sup>3</sup> of <sup>80</sup>Kr and  $0.6 \times 10^{-2}$  cm<sup>3</sup> of <sup>82</sup>Kr (using <sup>79</sup>Br and <sup>81</sup>Br, respectively); from AlI<sub>2</sub>7I,  $6.8 \times 10^{-4}$  cm<sup>3</sup> of <sup>128</sup>Xe. After exposure to high temperatures for three weeks, the quartz ampoules placed in a gas purification system containing liquid nitrogen or dry ice (for work with xenon) traps, KOH, CuO, and Ca. The purified gases were transferred into ampoules containing active carbon. Mass spectrograms of xenon exhibited only the peak corresponding to

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UPC: 621.039.3  
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Card 2/2

SHUKOLYUKOV, Yu.A.; LEVSKIY, L.K.

Determination of microamounts of xenon. Zhur.anal.khim. 19 no.9:1099-  
1105 '64. (MIRA 17:10)

1. Laboratory of Pre-Cambrian Geology and Khlopin Institute of  
Radium, U.S.S.R. Academy of Sciences, Leningrad.

LEVSKY, L.K.

Method of thermal analytical studies. Zhur. fiz. khim. 39  
no.8:1846-1847 Ag '65. (MIRA 1819)

LEVSTEK, I.

Distr: 4E2c/4E3b/4E3d

Nuclear magnetic resonance (NMR) and infrared study of  $(\text{NH}_4)_2\text{SO}_4$  and  $(\text{NH}_4)_2\text{BeF}_4$ . R. Blinc and I. Levstek (Inst. J. Stefan, Ljubljana, Yugoslavia). Phys. and Chem. Solids 12, 295-7 (1960).—The NMR and infrared spectra of  $(\text{NH}_4)_2\text{SO}_4$  and  $(\text{NH}_4)_2\text{BeF}_4$  have been investigated both in the nonferroelec. and in the ferroelec. phases. From the measured 2nd moments it was found that at room temp. the reorientations of the  $\text{NH}_4^+$  ions do not remain correlated with any specific axis of rotation. In  $(\text{NH}_4)_2\text{SO}_4$  a line-width transition was found below  $-110^\circ$ . Below the transition 2 components were resolved, which are interpreted as being due to "frozen-in" and rotating  $\text{NH}_4^+$  ions, resp. Above  $-180^\circ$ , no line-width transition was found in  $(\text{NH}_4)_2\text{BeF}_4$ . This shows that the H bonds N-H...F are weak. In the infrared spectra of both compds. bands involving the torsional modes of  $\text{NH}_4^+$  ions were found. Thus, the possibility of free rotation at room temp. must be excluded. The splitting of the  $\nu_4(\text{NH}_4)$ ,  $\nu_3(\text{SO}_4)$ , and  $\nu_3(\text{BeF}_4)$  bands below the Curie point indicates the deformation of these ions in the ferroelec. phase.

J. M. Hinig

6

1-BW(Bw)

1-MJC(JA)

2-JRJ(RB)(RB)

3

19

Dilatometric and nuclear magnetic resonance studies of polyethylene with different branching and crystallinity. A. Peterlin, F. Krašovec, E. Pirkmajer, and I. Levstek (Univ. Ljubljana, Yugoslavia). *Makromol. Chem.* 37, 231-42 (1960) (in English).—Dilatometric measurements were made between room temp. and immediately below the m.p.; they showed that the curves of 1st heating differ from those of subsequent cooling in all samples except of modocrys. prepns. Nuclear magnetic resonance (N.M.R.) was measured with low-resolution equipment to det. the derivation of absorption curve in 2° intervals from -170° to m.p. Samples studied were unbranched Marlex 50 and unbranched Du Pont polyethylenes; these gave ratio of the CH<sub>3</sub> end groups together with d., m. index, viscosity no. A sharp m.p. without relaxation phenomena in pure crystals was found by dilatometric investigation while N.M.R. reveals that the mobility of polyethylene chains is irreversibly increased by heating above 72°. Branched samples have remains of a narrow line; its intensity is proportional to the CH<sub>3</sub>/CH<sub>2</sub> ratio, even at -170°. N.M.R. spectra are given.  
Arthur Lyman

LEVSTEK, Igor

Magnetic resonance spectra of the protons  $(\text{NH}_2)_2\text{SO}_4$ .  
Glas Hem dr 25/26 no.3/4:173-174 '60/'61 4 2

1. Institut "Jozef Stefan," Ljubljana.

LEVSTEK, Igor

Physical methods for earthquake forecasting. Obz mat fiz 11  
no.1818-22 Je\*64

1. Jozef Stefan Nuclear Institute, Ljubljana.

LEVTEREV, M.S.

Contributions made by our efficiency promoters. Ugol' Ukr.  
3 no.9:32 S '59. (MIRA 13:2)  
(Mining engineering) (Automatic control)

S/133/62/000/008/002/003  
A054/A127

AUTHORS:

Leshchinskiy, L.Z.; Levterov, A.Kh.

TITLE:

Mechanization of production processes at the Magnitogorsk metallurgical kombinat (Magnitogorsk Metallurgical Combine)

PERIODICAL:

'Stal', no. 8, 1962, 750 - 752

TEXT:

At the Magnitogorsk Metallurgical Combine extensive plans are being made and put into effect for the mechanization and automation of production processes. The plans have partly been drawn up in the design department of the plant and partly with the cooperation of 125 planning and research organizations. 4300 suggestions for the above purposes were submitted in 1960. 2577 of these were accepted and 541 carried out. Some of the innovations which were the result of the combine's own effort are the following. In the mining department the excavator types were standardized, the number of main parts was reduced to 3 types. The bunkers of agglomerating plants are made of heat-resistant steel which prolongs their service life from 1 1/2 to 4 years. In the coke-chemical department the opening and closing of gate valves, moving of feeding cars and cleaning of coke-chamber gates were mechanized. The blast furnaces were reconstructed to

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Mechanization of production.....

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operate at an increased gas pressure under the charging hole. The service life of charging devices was increased by automatic hard-surfacing with the aid of pulverous electrode wires under a flux layer. In connection with the introduction of high temperature blast, the tuyere design was modified and they are made of heat-resistant steel. Using a conveyor for feeding the skips (without wagon weigher) entirely automated the charging of the furnace. In the open-hearth shop the productivity was raised by improved methods of furnace repair, which takes place without demolishing the foundation. The furnace shells are delivered fully assembled to the place of mounting with the aid of pouring cranes. The furnaces are adapted to evaporation cooling and most of them are fired by oil-well gas. The charge was increased to 400 tons, the capacity of pouring cranes rose from 220 to 270-280 tons, that of ladles to 210 tons and of charging shovels to 1.24; 1.75 and 2.20 m<sup>3</sup>. In the rolling shops several stands were added to the various roll trains. In 1955 the receiving roller track was lengthened by 26.5 m. The device for putting on slabs was adjusted to semi-automatic telecontrol which increased its rate up to 7 m/sec. New shears with a cutting force of 900 tons (instead of 650 tons) are used. The flying shears in use were replaced by planetary-type electric shears designed at the TsNIITMASH. Further mechanization and automation projects involve a continuously operating machine for the 250-2 stand to coil hot wire; a machine,

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Mechanization of production.....

mounted on the base of the C -100 (S-100) tractor, to remove slag from the slag chambers during repairs; an apparatus for the electro-spark machining of rolls of elevated hardness for the 250-1 stand; a complete set of machines to mechanize the production of tuyeres; an automatic sheet marking device; the improvement of tinning apparatus; the mechanization of chamotte-brick production, by applying semi-dry pressing instead of plastic pressing and the container transportation of refractory bricks into the open-hearth shop; the mechanized collecting of metal chips from under the hot rolling mills; an instrument for the self-centering of conveyor belts in the coal dressing shop; drills [EA -100- Π 1 (BA-100-P1)] for drilling holes in the slag chambers during furnace repair; the remote control of ladle stoppers; automation of sheet grading; a machine for packing batches (up to 1 ton) of large sized, thin tin sheets. A number of the above items and processes have already been introduced. It is hoped that the innovations will increase productivity during the 7-Years Plan by 75.5% (including 50.7% for cast iron, 68.6% for steel and 65.1% for rolled products). The planned measures will raise the number of personnel by not more than 9.6%. The plans for 1962 feature the mechanization of car-feed into the tippler by portal type pushers; the mechanization of tuyere change in the blast furnace; the mechanization of repairs in

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Mechanization of production.....  
railway transport, etc.

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A054/A127

ASSOCIATION: Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical  
Combine)

Card 4/4

LESHCHINSKIY, L.Z.; LEVTEROV, A.Kh.; BRAGIN, Ye.A.

Reorganization of the refractories industry. Ogneupory 29 no.3:  
104-108 '64 (MIRA 17:3)

1. Magnitogorskiy metallurgicheskiy kombinat.

TSENEV, Dimitur; LEVTEROV, Boris, inzh.

Roman floor heating with warm mineral water. Khidrotekh i  
melior 8 no.3:93-95 '63.

SCHTEREW, K. D. [Shterev, K. D.]; MARTINOW, S. L. [Martinov, S. L.];  
LEWTEMOW, B. K. [Levterov, B. K.]

Bulgarian mineral waters. Vest Ust geol 39 no. 1: 47-52  
'64.

1. Ministerium fur Gesundheitswesen und soziale Fursorge,  
Sofia.

LEVTEROV, S.

Meeting with scientists from abroad. Visnyk AN URSR 25 no.11;  
75-76 N°54.  
(Ukraine--Relations (General) with Bulgaria)  
(Bulgaria--Relations (General) with Ukraine)

LEVTEROV, S.

Meeting with scientists from abroad. Visnyk AJ UBSh 26 no.5:  
61 My '55. (MIRA 8:8)

(Ukraine--Relations (General) with Poland) (Poland--  
Relations (General) with Ukraine)

LEVTEROV, S.

Meetings with scholars from abroad. Visnyk AN URSR 26 no.8:77-80  
Ag'55. (MIRA 8:11)  
(Academy of Sciences of the Ukrainian S.S.R.)

LEVTEYEV, G.T., inzh.

Promote labor safety in pits of the "Dal'vosugol'" Combine.  
Bezop. truda v prom. 4 no.10:6-7 O '60. (MIRA 13:11)

1. Kombinat Dal'vostugol'.  
(Soviet Far East—Coal mines and mining—Safety measures)

<i>U.S. Foreign</i>	
FILE 1 BOOK EXPEDITION	807/2857
Issue. The machine-building factory prepared by I. N. Dzerzhinsky Produced industrial-type technical drawings (high-productivity Auxiliary Production Equipment) Moscow, March 1950. 8,000 copies printed.	62
Spanserine, A. G. <i>Obshcheto po napravleniyu politsicheskikh</i> 1 sistemnykh, many NTSO.	62
M. (title page), V. V. Pirogov, M. (index book); S. L. Martov; Sokol, N. A., T. G. Gorchakov, Nesterov, Yu. for literature on metal- working and mechanical construction (General); V. V. Kharinovskiy, Sukhanov.	62
Purush. This collection of articles is intended for technical personnel engaged in the development of military equipment for serial production.	62
contents: This collection contains articles dealing with modern machines and auxiliary equipment, methods of manufacture, and data on the in- troduction of such equipment into production, the organization and economic aspects of the use of standardized auxiliary equipment are also discussed. No generalities are mentioned. References follow each article.	62
Shestopalov, V. M. <i>Standardizatsiya Moshchnosty i Formas</i> for lot Production Employing Standardized Parts and Subassemblies of parts and subassemblies.	62
Bazantsev, F. I. and V. A. Romashov. <i>Experience gained in the Use of Standard-Unit Pictures in Experimental and Lot Production</i> 70	62
The author discusses the organization of the workplace for the assembly of universal standard-unit pictures. Existing methods are also discussed.	62
Titovskii, G. O. <i>Universalniye Chislennye Sistemnye Standardy</i> 63	63
Dorofeev, I. A. <i>Development and Introduction of Adjustable Machine-Tool Pictures</i> 91	63
The author describes fixtures which can be easily adapted for use on similar parts by rapid replacement of certain elements of the fixtures.	91
Sobolev, I. I. <i>Znach. Sistemnye Standardizatsiya i Standardizatsiya Serijno-Produktsionnykh Proizvodstv</i> 105	105
The author advocates the adoption of standardization programs in the planning, design, and manufacture of parts and auxiliary. He also urges the practice of classifying the processes of individual operations.	105
Shestopalov, V. M. <i>Introduction of Poly-Hydrop Stamping into Experimental and Serial Production</i> 127	127
The author describes a method of cutting by stamping with specially constructed dies of his own design. By means of combination a set of 8 to 10 dies can produce a large variety of parts.	127
Popov, P. P. [Boguslav]. <i>Universal Auxiliary Processing Equipment</i> 139	139
In this article numerous characteristics of tools for electrical machines and the manufacture of parts from plastic are described.	139
Dorofeev, I. A. <i>Standardization of Fixtures for Welding and Assembly</i> 145	145
units	145
The article deals with classification of standard fixtures for welding and assembly work. Rapid location with hydraulic, mechanical, and pneumatic clamping devices is described.	145
Shestopalov, V. M. <i>Use of Reinforced Concrete for Making Barriers for Explosive Work</i> 157	157
The article deals with the use of reinforced-concrete prefabricated blocks for fortification in erection work. The use of such blocks affords considerable economy of materials, particularly used for fortifications.	157
Shestopalov, V. M. <i>Standardization of Metal-Working and Auxiliary Tools for</i> 169	169
The article deals with the standardization of certain types of auxiliary tools and fixtures for series and serial machine tools. The standardiza- tion of other types of cited existing tools is also discussed.	169

RAYKHEL', Z.Sh.; LEVTOV, M.R.; MAGIDIN, L.Z.; YEL'KIN, M.A.

SL-9 and SL-8 sealed bottom discharge devices for petroleum tank cars.  
Transp. i khran. nefti i nefteprod. no. 7:21-24 '65. (MIRA 18:9)

ROGOVER, G.Ye., inzh.; LEVTOV, M.R., inzh.

Machine for placing the filter and the concrete. Mekh.stroi.  
19 no.11:24-26 N '62. (MIRA 15:11)  
(Hydraulic structures) (Concrete construction)

LEVTOV, M.R.; PUCHKOV, M.V.; PONOMAREV, A.N.; ROZENFEL'D, F.A.

Unit for local electric heating of viscous petroleum products in distribution reservoirs. Transp. i khran. nefti i nefteprod. no. 11:26-27 '64.  
(MIRA 18:1)

1. Leningradskiy filial Spetsial'nogo konstruktorskogo byuro "Transneft"-avtomatika".

NOVIKOV, Nikolay Yevgen'yevich; LEVTOV, Moisey Vul'fovich;  
BRODOTSKIY, A.I., red.

[Mechanization in the finishing shops and warehouses of  
finished products of woodpulp industry enterprises]  
Mekhanizatsiya v otdelochnykh tsekhakh i skladakh go-  
tovoi produktsii tselliulozno-bumazhnykh predpriiatii.  
Moskva, Lesnaia promyshlennost', 1965. 236 p.  
(MIRA 18:7)

LEVTOV, V.A.; MUSYASHCHIKOVA, S.S.

Relationship between local and general vascular reactions in connection  
with the intensity of the stimulation of the small intestine's  
chemoreceptors. Fiziol. zhur. 47 no.12:1477-1483 D '61.  
(MIRA 15:1)

1. From the Laboratory of Circulation and Respiration I.P.Pavlov  
Institute of Physiology, Leningrad.  
(INTESTINES--INNERVATION) (NERVOUS SYSTEM, VASOMOTOR)

KONRADI, G.P.; LEVTOV, V.A.

Correlation of general and local vasoconstrictor reactions in  
chemical stimulation of blood vessels. Trudy Inst. klin.  
i eksper. kard. AN Gruz. SSR 8, 551-553 '63. (MIHA 17:7)

1. Laboratoriya krovootrashcheniya i dykhaniya Instituta  
fiziologii AN SSSR, Leningrad.

LEVTOV, V.A.

Characteristics of vasmotor responses to chemical stimulation  
under the conditions of alternate perfusion of the small intestine  
with blood and Ringer-Locke's solution. Fiziol. zhur. 49 no.4:  
470-481 Ap '63. (MIRA 17:4)

1. Laboratoriya fiziologii krovobrashcheniya i dykhaniya Instituta  
fiziologii imeni Pavlova AN SSSR, Leningrad.

LEVTOVA, A. F. F. A.

USSR/Medicine - Lungs  
Medicine - Pressure

Nov/Dec 1947

"Biodynamics of the Lungs," Ya. G. Uzhanskiy, A. F. Levtova, Experimental Pathol  
Sec, Leningrad TB Inst, 41 pp

"Arkhiv Patolog" No 6

Lung pressure in animals rises when pressure in a barometric chamber rises to a point equivalent to 5,000 m. Increased atmospheric pressure distends lungs thus having an adverse effect on lung muscle tonus. Submitted, 7 Dec 1947. Deputy of Experimental Pathology Section: Prof L. R. Perel'man, Director of TB Institute: Prof L. A. Emdin.

PA 53T61

LEVTOVA, F. A.  
25894

O Vsasyvanii Krovyanoy Syvorotki Iz  
Bryushony Polosti. V AB: Voprosy Allergii  
I Immuniteta Pri Tuberkuleze. L. 1948  
s. 242-87

SO: LETOPIS NO. 30, 1948

LEVTOVA, F. A.

IA 41T68

USSR/Medicine - Anaphylaxis and Allergy Jan/Feb 1948  
Medicine - Rats

"Anaphylaxis of Albino Rats," F. A. Levtova, Chair  
of Pathol Physiol, Second Leningrad Med Inst, 3 $\frac{1}{2}$  pp

"Arkhiv Patol" Vol X, No 1

Studies produced the following results: 1) It was  
not possible to obtain a general serous anaphylactic  
reaction in white rats. 2) No local reactions were  
observed by Venevtsev's method. 3) Preliminary ad-  
ministration of heterogenous material to produce  
antigenic serum in rats, did not result in a sensi-  
tization of the tissues to subsequent antigen. Sub-  
mitted, 31 Jan 1947. Deputy of Chair of Pathologi-  
cal Physiology is Prof L. P. Perel'man.

41T68

LEVTOVA, F. A.

GEYMAN, Ye.Ya.; LEVTOVA, F.A.

Role of tissue metabolism in the mechanism of chemoreception. Biul.  
eksp. biol. i med. 38 no.7:13-17 Jl '54. (MIRA 7:8)

1. Iz otdela eksperimental'noy patologii (zav. G.S.Kan) i biokhimicheskoy laboratorii (zav. Ye.Ya.Geyman) Nauchno-issledovatel'skogo tuberkuleznogo instituta imeni A.Ya.Shternberga (dir. A.D.Semenov), Leningrad.

(INTESTINES, physiology,  
reflexes from chemoreceptors, role of metab.)

(METABOLISM, TISSUE,  
in form of reflexes from intestinal chemoreceptors)

(REFLEX,  
from intestinal chemoreceptors, role of tissue metab. in  
form.)

LEVTOVA, F.A.

Analysis of chemoreception in experimental tuberculosis. Report no.2: Reception mechanism of the tuberculosis antigen. Biul.eksp. biol. i med. 41 no.3:31-34 Mr '56. (MLRA 9:?)

1. Iz ot dela eksperimental'noy patologii (zav.-kandidat meditsinskikh nauk G.S.Kan) Leningradskogo nauchno-issledovatel'skogo tuberkuleznogo instituta (dir.-prof. A.D.Semenov). Predstavlena deystvitel'nym chlenom AMN SSSR V.N.Chernigovskim.

(TUBERCULIN, eff.

on tissue chemoreceptors in isolated small intestine in cats)

(INTESTINES, eff. of drugs on tuberculin, on tissue chemoreceptors in cats)

LEVTOVA, F.A.

Mode of action of aminazine and physical cooling on interoceptive reflexes. Zhur. nerv. i psikh. 60 no. 2:210-219 '60. (MIRA 14:4)

1. Patofiziologicheskaya laboratoriya (zav. - doktor meditsinskikh nauk Ye.M. Silayeva) Nauchno-issledovatel'skogo psikhonevrologicheskogo instituta imeni V.M. Bekhtereva (dir. - prof. V.N. Myasishchev), Leningrad.

(CHLORPROMAZINE) (HYPOTHERMIA) (REFLEXES)

LEVTOVA, F.A., starshiy nauchnyy sotrudnik

Reflexes from the chemoreceptors of a rabbit's foot stimulated by tuberculin. K izuch.roli nerv.sist.v pat., immun.i lech.tub.  
no.2:19-22 '61. (MIRA 15:10)

1. Iz laboratorii eksperimental'noy patologii i terapii (zav. -  
G.S.Kan) Leningradskogo gosudarstvennogo nauchno-issledovatel'skogo  
instituta tuberkulez.

(TUBERCULIN) (REFLEXES)

LEVTOVA, F. A.

Effect of aminazine on the behaviral and interoceptive reactions  
changed by stimuli of different biological importance. Zhur.  
nevr. i psikh. 63 no. 4:572-581 '63. (MIRA 17:2)

1. Psikhoneurologicheskiy institut imeni V. M. Bektereva  
(dir. - kand. med. nauk B. A. Lebedev; nauchnyy konsul'tant  
raboty - doktor med. nauk T. Ya. Khvilivitskiy), Leningrad.

(A)

L 11990-66

ACC NR: AP5028885

SOURCE CODE: UR/0219/65/060/011/0054/0058

AUTHOR: Levtova, F. A.

D  
B

ORG: Laboratory of Experimental Neuroses, Scientific Research Psychoneurological Institute im. V. M. Bekhtrev (Laboratoriya eksperimental'nykh nevrozov Nauchno-issledovatel'skogo psichoneurologicheskogo instituta); Laboratory of General Physiology and Laboratory of Nutrition Physiology, Institute of Physiology im. I. P. Pavlov, AN SSSR, Leningrad (Laboratoriya obshchey fiziologii i laboratoriya fiziologii pitaniya Instituta fiziologii, AN SSSR)

TITLE: Effect of some neuropsychotropic agents on food choice and regulation in dogs

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 60, no. 11, 1965, 54-58

TOPIC TAGS: pharmacology, animal physiology, chlorpromazine, central nervous system

ABSTRACT: Experiments were performed on two dogs with stomach fistulas to determine the effect of chlorpromazine and tofranil on food choice. Under normal conditions the animals' salt appetite decreased reflexly following introduction into the stomach of a hypertonic solution of sodium chloride, thereby preventing excessive salt intake and impairment of homeostasis. Neurotogenic factors (teasing with meat after 2-3 days of fasting, soaking with water, etc.) likewise elicited a defense reaction in the form of reduced salt appetite. On the other hand, chlorpromazine and tofranil, which inhibit

Card 1/2

UDC: 615.786-092.259:[612.833:612.39+612.833:612.39/.014.46:615.786

L 11990-66

ACC NR: AP5028885

the nerve structures of the reticular formation and defense reactions, had the opposite effect. The salt appetite increased and the dogs eagerly drank the offered milk-salt liquid, regardless of the salt concentration, even after a hypertonic sodium chloride solution was introduced into the stomach. This suggests that under the influence of chlorpromazine or tofranil, the biologically negative component of the food choice reaction (food rejection) is inhibited, whereas the biologically active component (food acceptance) is intensified. Orig. art. has: 3 figures. The paper was presented by Academician V. N. Chernigovskiy, 06 May 63.

SUB CODE: 06/ SUBM DATE: 06May63/ ORIG REF: 007/ OTH REF: 002

Hw

Card 2/2

SLUTSKINA, P.I.; LEVTOVA, F.A.

Some experimental clinical data concerning the differentiation and treatment of hypochondriac states. Trudy Gos. nauch.-issl. psikhonevr. inst. no.24:145-159 '61. (MIRA 15:5)

1. 2-oye psikhiatricheskoye otdeleniye Gosudarstvennogo nauchno-issledovatel'skogo psikhonevrologicheskogo instituta imeni Bekhtereva.  
(HYPOCHONDRIA)

LEVTOVA, K. Z.

LEVTOVA, K. Z. -- "The Significance of the Titer and Type Composition of Typhoid Phage in Evaluating Its Quality." Sub 26 May 52, First Moscow Order of Lenin Medical Inst. (Dissertation for the Degree of Candidate in Medical Sciences.)

SO: Vechernaya Moskva January-December 1952

ARKHANGEL'SKAYA, L.N.; LEVTOVA, K.Z.; CHECHULIN, A.S.

Some data on the employment of medical graduates of sanitary-hygiene faculties. Gig.i san. 24 no.11:48-49 N '59. (MIREA 13:4)

1. Iz I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.  
(HYGIENE education)

ARKHANGEL'SKAYA, L.N.; GALKIN, V.A.; GRIGORENKO, R.V.; LEVTOVA, K.Z.;  
CHECHULIN, A.S.; GARVEY, N.N., red.; RAYKO, N.M., tekhn.red.

[They serve the motherland; tenth anniversary of the graduation  
of physicians at the I.M.Sechenov First Moscow Medical Institute  
in 1949] Oni sluzhat Rodine; k 10-letiiu vypuska vrachei 1-go  
MOLMI imeni I.M.Sechenova 1949 g. Moskva, 1960. 81 p.  
(MIRA 14:6)

(MOSCOW--MEDICAL COLLEGES)

LEVTOVA, K.Z. (Moskva)

First antirabies stations in Russia. Fel'd. i aknsh. 25 no.3:  
33-36 Mr '60. (MIRA 13:6)  
(RABIES)

LEVTOVA, K.Z.

Methods of teaching problems of natural focus infection in a  
course on epidemiology. Zhur.mikrobiol.epid.i immun. 31 no.2:  
119-122 P '60.  
(MIRA 13:6)

1. Iz I Moskovskogo ordena Lenina meditsinskogo instituta imeni  
Sechenova.  
(EPIDEMIOLOGY education)

YEFREMENKO, A.A.; LEVTOVA, K.Z.

On the opening of the Pasteur station in Samara. Zhur. mikrobiol.  
epid. i immun. 31 no. 5:33-35 My '60. (MIRA 13:10)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei  
AMN SSSR i I Moskovskogo ordena Lenina meditsinskogo instituta  
imeni Sechenova.

(SAMARA—RABIES)

KLIMENKO, Ye.P.; LEVTOVA, K.Z.

"Manual on practical studies in epidemiology" by D.Bratovanov,  
K.Iankov, Zh.Targov. Reviewed by E.P.Klimenko, K.Z.Levtova.  
Zhur.mikrobiol.epid.i immmuh. 31 no.8:147-148 Ag '60.

(EPIDEMIOLOGY) (BRATOVANOV, D.) (MIRA 14:6)  
(TARGOV, Zh.) (IANKOV, K.)

BELIKOVA-ALDAKOVA, V.D.; DODONOV, N.N.; ZHERIKOVA, A.D.; ZHOGOVA, M.A.;  
KLIMENKO, Ye.P.; LEVTOVA, K.Z.; MITROFANOVA, Ye.B.; PANTELEYEVA, T.B.;  
SOLOV'YEVA, N.A.

Results of smallpox vaccination in various age groups. Zhur.  
mikrobiol. epid. i immun. 31 no. 10:28-32 0 '60. (MIRA 13:12)

1. Iz kafedry epidemiologii I Moskovskogo ordena Lenina  
meditsinskogo instituta imeni Sechenova.  
(SMALLPOX)

YEFREMENKO, A.A.; LEVTOVA, K.Z.

M.I.Afanas'ev, the founder of the St.Petersburg Microbiological School,  
on the 50th anniversary of his death. Zhur.mikrobiol., epid. i imun.  
32 no.11:145-147 N '61. (MIRA 14:11)

1. Iz kabinetra istorii mikrobiologii Instituta epidemiologii i  
mikrobiologii imeni Gamalei AMN SSSR i kafedry epidemiologii  
I Moskovskogo meditsinskogo instituta imeni Lenina.  
(AFANAS'EV, MIKHAIL IVANOVICH, 1850-1910)

LEVTOVA, K.Z., kand.med.nauk

Rodents are doomed. Zdorov'e 9 no.3:14-15 Mr '63.

(MIRA 1685)

(RODENTS AS CARRIERS OF DISEASE)

LEVTOVA, K.Z.; KLODNITSKAYA, S.N.

Fiftieth anniversary of the discovery of the role of camels  
in the epidemiology of plague. Zhur. mikrobiol. epid. i  
immun. 40 no.5:154-156 My '63. (MIRA 17:6)

1. Iz I Moskovskogo ordena Lenina meditsinskogo instituta imeni  
Sechenova i Moskovskogo oblastnogo nauchno-issledovatel'skogo  
klinicheskogo instituta.

LEVTOVA, K.Z.; BESSMERTNYY, B.S.; LYCHKO, N.D.

Reviews and bibliography. Zhur.mikrobiol., epid. i immun. 42  
no.9:155-157 S '65. (MIRA 18:12)

LEVTOVA, K.Z.

Nadezhda Karlovna Shul'ts, a scientist and teacher; on the  
125th anniversary of her birth. Zhur. mikrobiol., epid. i  
immun. 42 no.11:147-149 N '65. (MIRA 18:12)

1. I Moskovskiy ordena Lenina meditsinskiy institut imeni  
I.M. Sechenova. Submitted June 10, 1964.

KAULINS, Alberts; LEVTOVS, Arons; DIMDINS, J. [translator]; CERKOVSKIS, P.,  
red.; ZAGARS, A., tekhn. red.

[Agricultural planning for elementary schools and study groups on  
agricultural economics] Lauksaimnieciskas razosanas planosana;  
lauksaimniecibas ekonomikas pamatskolu un pulcinu klausitejiem.  
Riga, Latvijas Valsts izdevnieciba, 1961. 47 p. (MIRA 15:3)

1. Sekretar' rayonnogo komiteta Latviyskoy kommunisticheskoy  
partii goroda Ogre (for Kaulins).  
(Agriculture)

T 01304-67 EWT(1)/EWT(m)/EWP(e) IJP(c) WH  
ACC NR: AP6002208

SOURCE CODE: UR/0153/65/008/005/0822/0824

AUTHOR: Levtsova, Z. A.

52  
B

ORG: Leningrad Technological Institute im. Lensovet, Department of Glass Technology  
(Leningradskiy tekhnologicheskiy institut, Kafedra tekhnologii stekla)

TITLE: Procedure for measuring the volume electric conductivity of glasses in the  
solid state

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 8, no. 5, 1965, 822-824

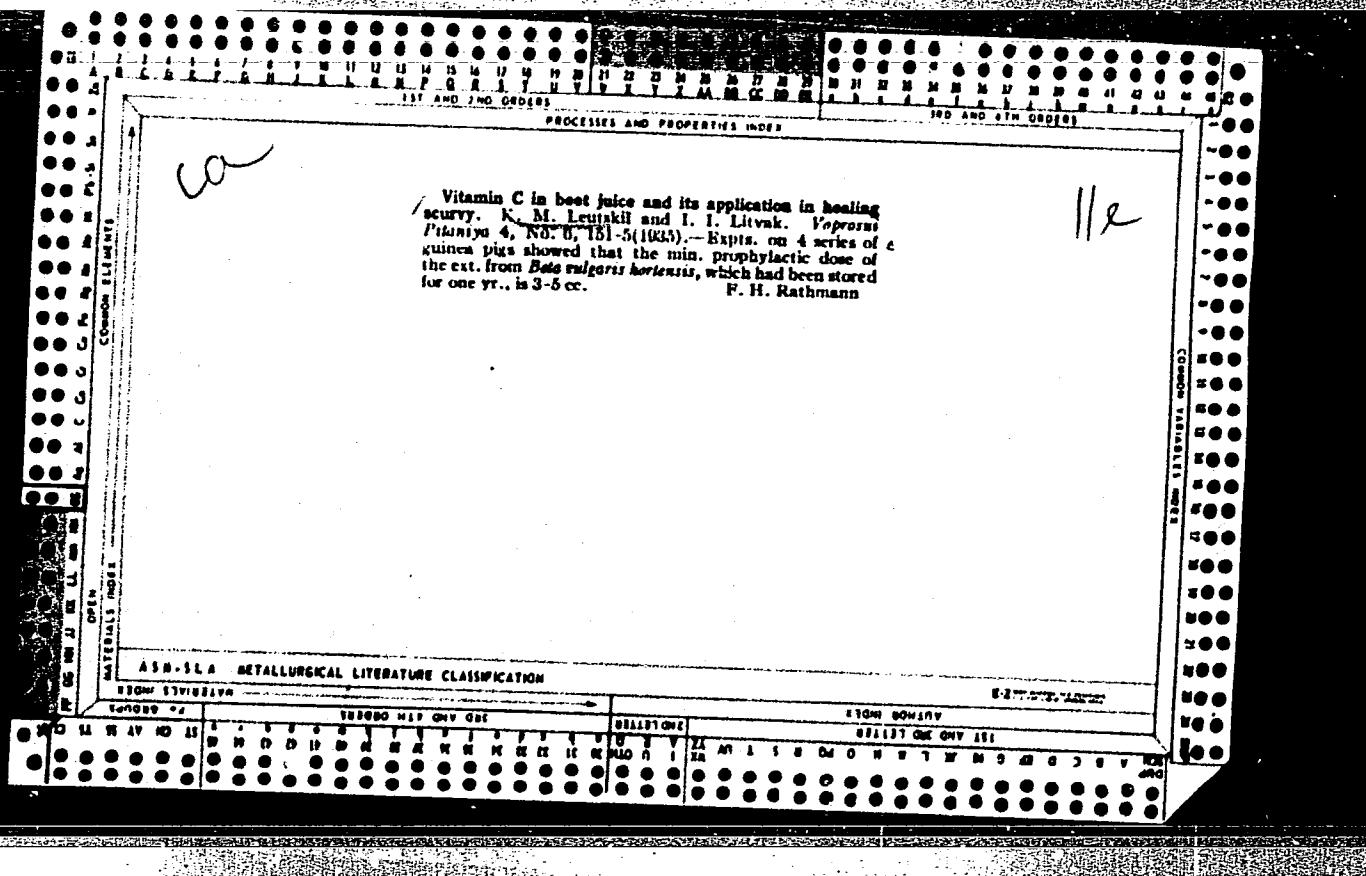
TOPIC TAGS: optic glass, electric conductivity, hardening

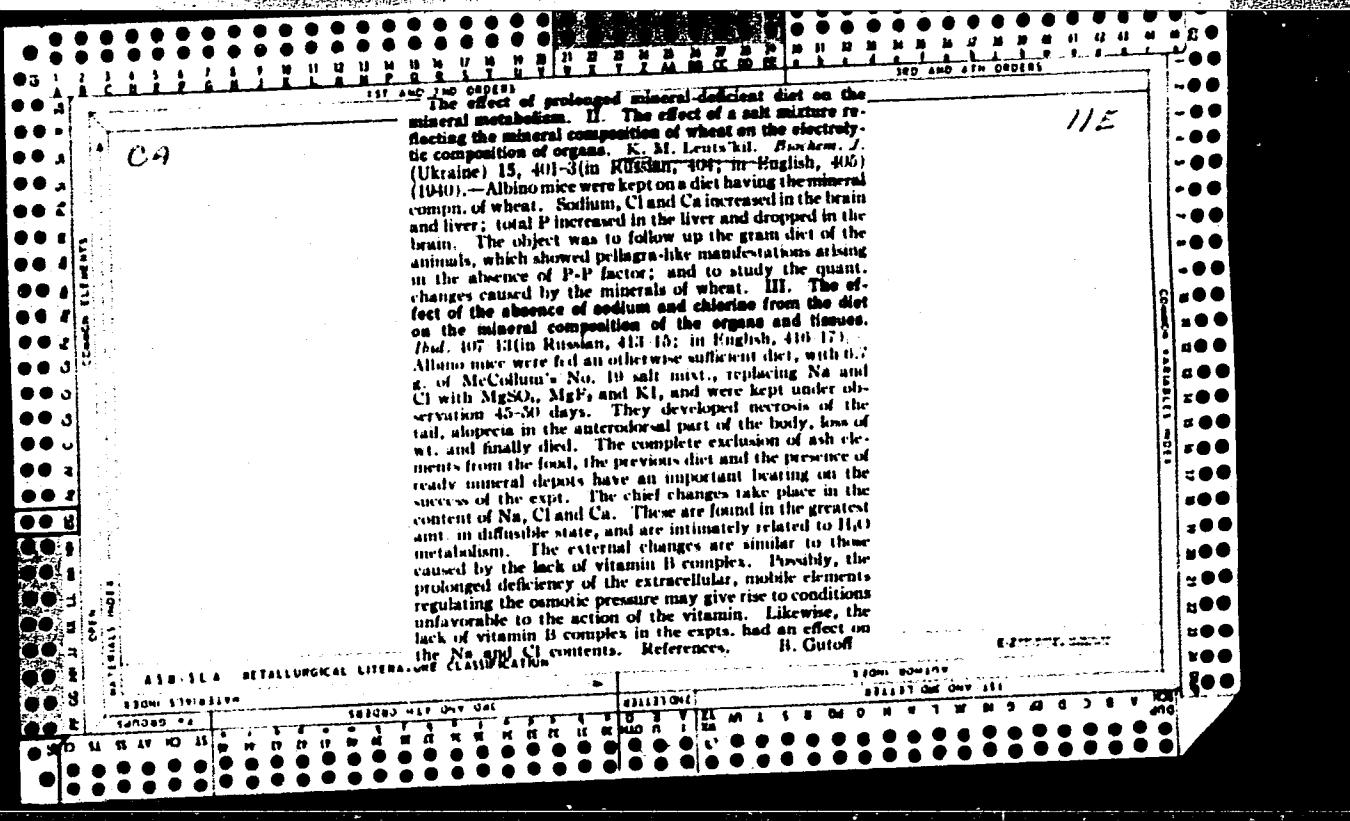
ABSTRACT: An investigation of the effect of temperature on volume electric conductivity ( $\rho_v$ ) was promoted by the irregular behavior of low-alkali or alkali-free optic glasses after heat treatment (hardening at temperature  $t_h$  and subsequent annealing) observed during measuring of volume electric conductivity: (1) the electric conductivity decreased with increased  $t_h$ , which disagreed with literature data and experiments with alkali-containing glasses; (2) the curve  $\log \rho_v$  vs  $1/T$  ( $T$  = temperature) had a complex character with intersections and inflections; (3) after exposure to  $>500^\circ\text{C}$  and subsequent cooling, the linear character of the curve, observed at the beginning of measuring, disappeared during repeated measuring of the same sample. The direct measuring of electric conductivity at temperatures  $>250-300^\circ\text{C}$ , made by using a mirror galvanometer and a voltmeter, showed that a number of alkali-free and low-alkali

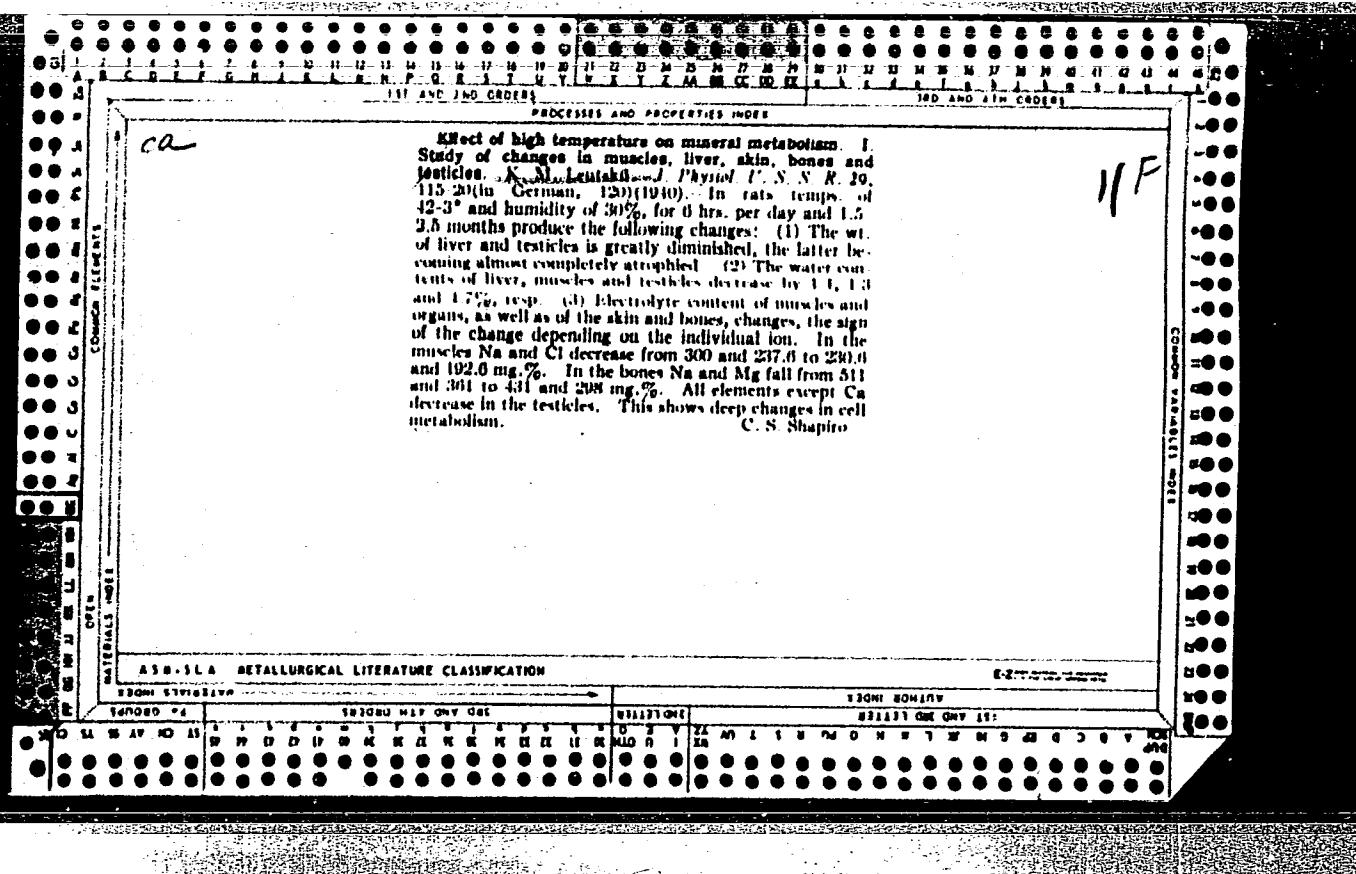
Card 1/2

UDC: 537.2

Card 2/2







**Effect of vitamin A on the mineral metabolism.** K. H. Leut<sup>sch</sup> Utriaen. *Biochem. J.* 18, 87-103 (1948).—To determine the influence of vitamin A on the distribution of electrolytes (56 exptl. animals (50-65 g. white rats) against 23 controls were fed a normal diet free from vitamin A and subsequently killed in the initial stages of xerophthalmia. The av. amts. of K, Ca, Mg, P, and Cl in the muscles, on a dry basis, were resp., 274, 49, 99, 1111, and 192 against 2000, 45.1, 101, 1035, and 180 mg. % (in the controls); in the brain tissue, 2110, 66, 82.7, 1644, and 425, resp., against 2006, 54, 69, 1000, and 499; in the liver, 1307, 30.7, 93.7, 1309, and 267 against 1300, 27, 78, 1290, and 291; in the nerve tissue 1566, 76.3, 83.9, 1233, and 738 against 1577, 45.4, 77.1, 1092, and 719; in the skin, 65.6, 0.6, 34, 321, and 733, against 356, 40.6, 36, 347, and 710. There was no increase of Ca in the intestines, a considerable accumulation of Ca, Mg and P (which have a bearing on calculus formation) in the kidneys even before the appearance of symptoms of avitaminosis. There was an accumulation of Ca in the lungs, a smaller increase of P, and still smaller of Mg.

11 E

## **APPENDIX A: LITERATURE CLASSIFICATION**

ארכיאולוגיה ותנ"ך

APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R000929710C

~~LEUTSKIY, K.M., professor; PETROVSKIY, G.A., professor, otvetstvennyy~~  
~~redaktor~~

[Vitamins; studies on the characteristics of B<sub>2</sub> complex vitamins]  
Vitamininy; ocherki svoistv vitaminov kompleksa B<sub>2</sub> [L'vov] Izd.  
L'vovskogo gos. univ., 1949. 298 p.  
(VITAMINS-B) (MIRA 9:12)

Chemical Abst.  
Vol. 48 No. 6  
Mar. 25, 1954  
Biological Chemistry

Effect of vitamin A upon metabolism. II. Effects of Vitamin A insufficiency upon phosphorolysis in the liver. K. M. Leuts'kil and A. I. Bruslavets (Chernovitsi State Univ.), *Ukrain. Biokhim. Zhur.* 22, 442 (1950) (in Ukrainian with Russian summary); cf. *C.A.* 41, 6017a.— Phosphorolysis was detd. by the concn. of inorg. P in the fluid portion of liver homogenate, with and without the use of NaF to inhibit dephosphorylation of esters formed by phosphorolysis of glycogen. Rats were kept for 25 days on a diet lacking vitamin A, after which 0.5 g. of liver homogenate plus 4 times the amt. of physiol. saline, and 0.02M NaF, was incubated at 38° for 1 hr. Liver inorg. phosphate: controls 9.0, controls + NaF 6.0, deficient 4.3, deficient + NaF 3.6, deficient followed by return to vitamin A 6.1, deficient followed by return to vitamin A + NaF 4.7. Inorg. P was twice as low in fluid from liver homogenates of avitaminotic rats as compared to controls. Following as little as 4-5 days' return to complete diet, inorg. P increased. It is concluded that vitamin A is related to phosphorolysis of tissue. Clayton P. Holloway

110

CP

G

Content of nicotinic acid and tryptophan in seeds of kidney bean in sprouting and ripening. N. M. Leutskii and R. I. Stul'nikova (Chernovitsk State Univ.). *Voprosy Akad. Nauk S.S.R.* **80**, 910-21(1951).—As the seeds sprout nicotinic acid accumulates while total tryptophan (I) drops after 3 days, until which period an increase of free I is observed. In early ripening of the bean nicotinic acid is rather high (32 mg. %) but this drops by a factor of nearly 5 by the time of complete ripening; I rises very slightly during this period, largely due to increase of the bound form with a decrease of free I.  
G. M. Kosolapoff

1952

LEUTSKIY, K.M.

[Vitamin A] Vitamin A. Chernovtay, 1959. 453 p. (MIRA 13:8)  
(VITAMINS--A)

LEUTSKY, K.M.

Respiration of rat tissue devoid of vitamin A. K. M.

Leuts'kiy and E. M. Lyubovich (State Univ. Chernovtsi, Ukr. S.S.R.). *Ukrain. Biokhim. Zhur.*, 24, 172-5 (1952); cf. C.I., 41, 6947a.—By manometric methods it was shown how vitamin A depletion affects O consumption by brain, liver, kidney, and muscle, representing tissues of varied storage and requirements of vitamin A. White rats, 70-g. wt., were used. Tissues were minced on ice and 100-mg. portions placed in Ringer-phosphate, pH 7.3, and O uptake noted. The rats were divided into 3 groups: (1) controls; (2) deprived of vitamin A for 2 months, and (3) with vitamin A for 10-12 days after 2 months' deprivation. Results are (in cu. mm. of O/100 mg. raw tissue/hr.): (1) brain 234; liver 160; kidney 342; muscle 42.9; (2) brain 392; liver 210; kidney 414; muscle 37.1; (3) brain 241; liver —; kidney 357; muscle —. Vitamin A absorbs O and catalyzes oxidation of unsatd. fatty acids, from which it might be expected that O consumption would be decreased by vitamin A exclusion. However, when vitamin A is given to avitaminotic rats, the O consumption in brain, kidney, and liver actually increases. Clayton P. Hickey

- chem & Biochemistry

(1)

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Disturbances of methylation processes in animal tissues with deficiency of sodium and chloride. K. M. Levitskii and P. L. Naumchuk (Chernovitsk State Univ.). Doklady Akad. Nauk S.S.R. 86: 1203-4 (1952).—White rats on a diet lacking in Na and Cl for 70 days (for establishment of controls) and continued thus for 2 weeks (controls now supplied with Na and Cl) display a severely depressed liver activity in respect to the ability to methylate nicotinamide in the presence of methionine. The activity is 0.26-0.3 of normal. The methylation at the expense of Me groups derived from the tissue (liver) is also depressed by over 50%. A rather complete recovery ensues in 2 weeks on normal diet. I. M. Kowalskoff

L TS'KIV K.M.

USSR.

The study of the role of nicotinic acid and vitamin A in food metabolism. K. M. Leuts'kii (State Univ., Chernovitsi). *Vitaminyn, Akad. Nauk Ukr. S.S.R.* 1 230-52 (1983).—A review of the exptl. works of L. and his co-workers. E. Wierbicki

LEUTSKIY, K. M.

USSR/Biochemistry

Card 1/1

Authors : Leutskiy, K. M., and Lyubovich, E. N.

Title : Content of phosphatides and unsaturated fatty acids in connection with the change of acidifying processes in tissues of rats during vitamin A deficiency.

Periodical : Dokl. AN SSSR, 96, Ed. 2, 341 - 342, May 1954

Abstract : Tests on young white rats showed that the phosphatide content changes sharply during vitamin A deficiency in the kidneys, lungs and brain and does not change in the liver and muscles. As is known the kidneys and lungs are more affected by A-avitaminosis than are other tissues. The phosphatide content in the kidneys increases to 91%, in the lungs to 73% and in the brain to 31%. Four references; 1 USSR. Tables.

Institution : State University, Chernovitsy, Ukr-SSR

Presented by : Academician A. I. Oparin, March 5, 1954

LEUTSKIY, K. M.

USSR/ Chemistry - Biochemistry

Card 1/1 Pub. 22 - 31/54

Authors : Leutskiy, K. M., and Leutskaya, Z. K.

Title : Relation between the vitamin A and carotene content in the organism  
and presence of albumina in the food

Periodical : Dok. AN SSSR 100/3, 519-520, Jan 21, 1955

Abstract : Experiments were conducted on white male rats to determine to what extent vitamian A and carotene contents in the animal organism depend upon the albumin content in the food. The results obtained are tabulated. Four references: 2 USSR, 1 Canadian and 1 USA (1934-1952). Table.

Institution : State University, Chernovtsay

Presented by: Academician A. I. Oparin, November 11, 1954

EXCERPTA MEDICA Sec.2 Vol.9/9 Physiology,etc.Sept56

3951. LEUTSKI K. M. and LYUBOVITCH E. N. \*Disturbances of cholesterol metabolism due to vit. A deficiency (Russian text) DOKLADY AKAD. NAUK SSSR 1955, 104/2 (280-282) Tables 3  
The most marked decrease of cholesterol (I) content is found in the adrenal; this emphasizes the extreme importance of the adrenal for I metabolism. The levels in brain and kidney are also lowered, while that in the urine is unchanged and that in the faeces increased. It is concluded that synthesis of I is disturbed by vit. A deficiency.

Rajevska - Belgrade

USSR / Cultivated Plants. Plants for Technical Use. M-6  
Sugar Plants.

Abs Jour: Ref Zhur-Biol., 1958, No 16, 73087.

Author : Leutskiy, K. M.

Inst.: Chernovitskiy University.

Title : On the Use of Nicotinic Acid for Accelerating Germination of Sugar Beet Seeds.

Orig Pub: Nauchn. yezhegodnik. Chernovitsk. un-t, 1956(1957),  
1, No 2, 11.

Abstract: Seeds were treated with a solution of nicotinic acid (1 g per 100 l of water) for 18-20 hours and after drying were planted. Seed treatment accelerated the appearance of beet sprouts by 2-3 days. The mechanism of the nicotinic acid effect consists in the germinating seeds of its transformation through nicotinamide into the respiratory en-

Card 1/2

115

T-2

USSR/Human and Animal Physiology - Metabolism.

Abs Jour : Ref Zhur - Biol., No 7, 1958, 31371

Author : Leutskiy, K.M.

Inst Title : New Data on the Biological Role of Vitamin A.

Orig Pub : V sb.: Vitaminy, 2, Kiyev, AN USSR, 1956, 144-151

Abstract : By the activities of the author and collaborators, it was shown that during the avitaminosis of A in rats, the retention of R and an increase of the content of phosphatides in the kidneys (91%), lungs (73%) and in the brain (31%) occurs in the organism. The quantity of R excreted with urine during avitaminosis of A decreases (from 239 to 173.6 mcg in 24 hours). The introduction of vitamin A eliminates these disturbances. During a reduction of the content of protein in the food of the rats from 18 to 3%, the quantity of A in the liver drops (on the average from 99 to 43% in 1 g. of net weight tissue) and with the

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Nicotinic acid metabolism in sodium and chlorine deficiency. Vitaminy  
no.2:152-157 '56.  
(MLRA 10:8)

1. Kafedra biokhimii Chernovitskogo gosudarstvennogo universiteta  
(NICOTINIC ACID) (SODIUM--PHYSIOLOGICAL EFFECT)  
(CHLORINE--PHYSIOLOGICAL EFFECT)

LEUTSKIY, K.M.; LYUBOVICH, Ye.N.

Changes in the hormonal activity of the adrenal cortex in  
vitamin A deficiency. Nauch.dokl.vys.shkoly;biol.nauki no.3:  
90-92 '58. (MIRA 11:12)

1. Predstavlena kafedroy biokhimii Chernovitskogo gosudarstvennogo  
universiteta. (ADRENAL CORTEX) (VITAMINS-A)

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~~Impairment of cholesterol metabolism in vitamin A deficiency [with summary in English]. Vop.med.khim. 4 no.1:43-49 Ja-F'58 (MIRA 11:5)~~

1. Kafedra biokhimii Chernovitskogo gosudarstvennogo universiteta.  
(VITAMIN A DEFICIENCY, experimental  
eff. on cholesterol content of organs (Rus))  
(CHOLESTEROL, metabolism  
organ content in exper. vitamin A defic. (Rus))

EXCERPTA MEDICA Sec 2 Vol 12/5 Physiology May 59

1630. IMPAIRMENT OF CHOLESTEROL METABOLISM IN VITAMIN A DEFICIENCY (Russian text) - Leutsky K. M. and Lobovich E. N. Dept. of Biochem., Chernovitz State Univ., Chernovitz - VOPR. MED. KHIMII

1958, 4/2 (43-49) Tables 6

In vit. A-deficient rats the cholesterol content falls most sharply in the adrenals and to a lesser extent in brain, liver, and spleen. The content per unit weight is not changed in kidneys and is increased in testicles, but because of loss in weight of these organs, the total amount of cholesterol is decreased. Administration of vit. A restores normal cholesterol content in all organs.

Leicester - San Francisco, Calif.

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Effect of the deficiency and excessive amounts of sodium and chlorine  
in food rations on vitro synthesis of nicotinic acid from L-tryptophane  
by the liver [with summary in English]. Ukr.biokhim.shur. 30 no.4;  
(MIRA 11:9)  
487-493 '58

1. Kafedra biokhimii Chernievt'skogo derzhavnogo universiteta.  
(SODIUM--PHYSIOLOGICAL EFFECT)  
(CHLORINE--PHYSIOLOGICAL EFFECT)  
(NICOTINIC ACID)

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"Study of the Role of Vitamin A in Metabolism"

Report presented at the 5th Int'l Biochemistry Congress,  
Moscow, 10-16 Aug. 1961

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Evaluation of body requirements for vitamin A. Vop. pit. 20 no.5:  
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1. Iz kafedry biokhimii Chernovitskogo gosudarstvennogo universiteta.  
(VITAMINS--A)

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Participation of Vitamin A in the Metabolism.

Report to be presented at Medical Society of J.E. PURKYNE, Czech,  
Vitaminological Cong., Prague Czech., 3-6 Jun 63

LEUTSKIY, K.M., prof., ovt. red.; KALYUZHNYY, I.F., dots., red.;  
LISHCHENKO, N.A., dots., red.; BYKOVA, O.Ye., kand. filol.  
nauk, red.; GOROKHOVA, Z.N., dots., red.; TOKMAKOV, A.I.,  
dots., red.; DOMBROVSKIY, A.V., dots., red.; BELYAYEV, N.G.,  
dots., red.; LYUBOPYTNOVA, V.S., dots., red.; MUZYCHKO, G.I.,  
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Chernovtsy, Chernovitskii gos. univ., 1958. 522 p.  
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Effect of vitamin A on the content of pyridine nucleotides,  
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Interaction of vitamin A and chlortetracycline in metabolism.  
Ukr. biokhim. zhur. 35 no.2:244-250 '63. (MIRA 17:9)

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Ukr. biokhim. zhur. 36 no.3:349-354 '64. (MIRA 17:10)

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